







## MODERN BANKING

Three Addresses delivered at Chautauqua, New York

by

FRANK A. VANDERLIP
President, The National City Bank of New York

August
Nineteen Hundred and Eleven

longer 2

HG1611 .V3

## WHAT IS A BANK?

The importance of the part played by the banking business in the modern industrial and commercial system is so obvious that it cannot be doubted even where it is but imperfectly understood. Its relations to a highly specialized society are analogous to those of the vital organs to the human body; when its functions are interrupted there is paralysis throughout the system.

The lower forms of life are so simple that you may cut through them and subdivide them at will without any impairment of vitality, but as organization develops, with a circulatory system and coordinate functions for the several parts, this independence of the parts is lost. And so in a primitive society the individual is comparatively independent, but as organization takes place and specialization proceeds and the exchanges of

civilized life develop, the well-being of the individual becomes more and more dependent upon the perfection and regularity and stability of the system by which the exchanges are made; and banking, through its various functions, is the most

important agency to this end.

These functions have been developed with the development of the exchanges and to provide facilities for handling the exchanges. They are a part of the necessary equipment of modern society, without which the present volume of trade, the existing distribution of population and the prevailing style and scale of living would be impossible. Our civilization is based upon the division of labor. Its industrial efficiency, its wealth of production, its comforts and luxuries and variety of opportunity are the results of organized and co-operative effort. If each member of the community, instead of supplying all his own wants, devotes himself to one thing and all exchange these

surplus products with each other, the sum total of production and of their possessions is increased. By this arrangement individual aptitude and talent is encouraged, capital is utilized and the advantages of enlarged and systematic production are secured. But economies and improved facilities in the exchanges are as desirable as in production; in fact the people who are engaged in transportation and trade and banking are engaged in producing the goods at the place of consumption. And the lower you can reduce the cost of making the exchanges the nearer you come to endowing each man with the skill of all the race and the resources of every land and clime.

The first important requisite of commercial intercourse was a common measure of value. Money was the first great facility of trade. Its convenience as a common means of payment was great, but the after effects were vastly more important. It created a new language, the language of values, which compares with

barter as speech does with sign language. It made prices and markets possible and enormously increased the possibilities of trade. Men could understand each other when they talked of values in terms of money, and in the precious metals they found a common denominator that brought all values into relation with each other.

This use of money as a measure or resolvent of values soon extended far beyond its use as mere currency. Grain and cattle and cloth and personal services could be valued and compared in terms of money and exchanged without any money changing hands, or with only the balances paid in money; and this system of refined barter has developed until the commerce of the world revolves upon the grain of gold as an axis, with almost insignificant payments of money. The system was complete when the credits arising from the sale of goods were dissociated from the goods and became a new and distinct species of property, which could be traded in, transferred, merged, or cancelled by corresponding debits.

The fundamental feature of this system of settlements is the fact that in the long run the exchanges settle themselves. All sales are made for the purpose of obtaining the means of making purchases. Broadly speaking, all income is disbursed, either for current expenses or for investments. The wage-earner pays out usually a large part of his income for living expenses and the rest in payments on a home or to a savings bank. The business man disburses his receipts for goods or materials, labor, rents and the various costs of doing business, and the surplus to enlarge his business or for private expenditure or investment. Every item of one man's outgo is an item of another man's income and in the aggregate income and outgo must balance, both for individuals and communities. A country cannot continually buy more than it sells or sell more than it buys unless there are compensating

transactions under other names. It would take the entire stock of gold in the United States to pay for the goods we import in a single year, if gold was the only means of payment; clearly foreigners could not continue year after year to sell to us in increasing volume unless they were taking payment in commodities which we produce in corresponding supply. Fluctuations in the movement of commodities between countries and localities will naturally occur, resulting from the varying yield of the crops and other conditions subject to change, and the temporary discrepancies are bridged over with money; but the broad fact must be recognized that trade is essentially reciprocal, and therefore the credits and debits that arise in the exchanges, if they can be brought together, will practically offset and settle themselves.

This task of bringing together the multitudinous transactions of the business world, in order that settlements may be effected without the risk of robbery and

cost of transportation and loss of interest attendant upon payments in money, is one of the functions of banking, and perhaps the earliest one to be developed. Certainly not only the Italian traders of the middle ages but the Romans before the Christian Era were familiar with the Billof Exchange, for when Cicero was about to send his son to school at Athens he wrote to inquire "whether he can take a Bill for the money he will want in Athens, or whether he must take the money itself with him." This indicates that the settlements between distant cities were handled substantially then as now, by a system of book entries and offsets, if not through banks like ours, through regular dealers in exchange.

If a man in Athens had a payment to make to a resident of Rome and at the same time had a like payment coming to himself from another resident of Rome, obviously the simplest way to accomplish both settlements would be to have his Roman debtor pay his Roman creditor

and send the receipt to Athens. Or if he had numerous dealings in Rome he might empower one agent to collect all that was coming to him and pay all that he was owing. But one man might not have both credit and debit transactions with different people in a distant city; he might, like Cicero, be only a buyer, or he might be only a seller in that market; and so the exchange dealer was developed as the agency for bringing the debits and credits together. It is safe to say that on the very day that Cicero bought his bill on Athens some Athenian was buying a like bill on Rome, and when the two instruments reached their destinations they balanced and cancelled each other. Moreover, if Athens wanted to pay Alexandria, or Damascus wanted to pay Corinth, it is likely that a bill on Rome was the medium, for it is easy to conceive that Rome in those days must have been the clearing-house of the world and that a credit there would be good anywhere.

It doesn't take a mercantile community

long to understand facilities like these. It is probable that mercantile houses in the regular trade were the first to buy and sell credits in distant cities, but as the exchanges multiplied the traffic would naturally centralize in the hands of exclusive dealers, and the more so as the element of time became increasingly important and called for the employment of large capital. When Cicero bought his bill on Athens the exchange dealer sold his own credit for cash, but a Roman merchant forwarding a bill of goods to Athens might prefer to sell his prospective credit for cash, in which case the exchange dealer would be buyer and have the credit to carry to maturity. This, as a matter of fact, is the common form of foreign exchange transactions, and it includes a larger service than the mere settlement of maturing credits. exchange dealer has bought the account, and the shipper, instead of awaiting the delivery of the goods and the arrival of the remittance, comes into immediate

possession of the proceeds and can turn them back into his business. Evidently a new and useful sub-division is here established in the circle of the exchanges. The manufacturer or merchant, having effected the sale and converted his goods into a credit in terms of money, is at the end of his function, and the sooner his capital is released from that transaction and returned to the field in which he is a specialist the better. The dealer in credits, or banker, whose specialty it is to arrange the liquidation of such credits, bringing them together by corresponding dates and places, now steps in and for a small consideration carries them to maturity and makes the collection.

The advantages of settling the credits and debits of trade by this arrangement of offsets were doubtless more apparent at first where cross-payments were to be made between distant localities, but another development was under way which was destined to extend the system to include practically all classes of pay-

That development was the growth of deposit banking. This type of banking was also known to the Romans in its primitive form, which was simply that of a safe deposit business. They had a custom of keeping coin with an agent and making payments by personal or written order, but the custodian had no right to use the funds on his own account. He was paid for his care-taking and the advantages to the depositor were in safety and convenience. An account which dates from 1584 of banking in Venice says: "Buyer and seller are satisfied in a moment, while the pen moves over the page; whereas a day would not be enough to complete the contract for a great mass of merchandise by counting a great number of coins." There is plenty of evidence, however, that long before this date private bankers in Venice had been receiving deposits and using them in private ventures, but with such disastrous results that in 1587 the State created an institution to take over the

banking business of Venice and conduct it strictly as the custodian of money consigned to its care. The Bank of Venice made no loans, and accepted no deposits but cash.

The great banks of Amsterdam and Hamburg in the seventeenth and eighteenth centuries were of the same class; and the first deposit-banking in England, that of the goldsmiths, began in the same way. They had strong boxes for the protection of their own valuables and consented to receive money for safe-keeping on a small charge. As experience showed that in the usual course of business withdrawals and deposits offset each other it became apparent that a considerable portion of the deposits might be loaned and made productive. This is where the goldsmith became a banker as we understand the term. His relation to the deposits underwent a radical change; instead of being the custodian he became the owner. He was in debt for them, but they were his, and, subject to the provisions he must make for repayment, this hitherto dead capital became available for use. From being a mere convenience he became an active and independent factor in affairs.

The change was of tremendous importance. It signified much more than the release of a given amount of coin for circulation. It created a vast fund of credit which used with moderation and understanding had all the potency of the highest form of capital. Credit is not a substitute for capital, but it is a most effective agency of capital. It is capital's other self, endowed with the powers of the principal but possessing an elasticity and mobility which the principal does not have. If it has been misused in ignorant hands with calamitous results that is no more than has happened with all the great forces and influences that contribute to the progress of the world.

The banks of the United States hold about \$1,500,000,000 of money and they have approximately \$15,000,000,000 of deposits and \$12,000,000,000 of loans. If

they were doing business under the old plan, and could possibly gather up \$1,500,000,000 of money, that would be exactly the amount of their deposits and their loans and discounts could not exceed their capital. It is impossible to conceive of the modern industrial and commercial organization without the modern system of banking.

The banker, evolved from the goldsmith, was an intermediate species; he was primarily a dealer in money and incidentally a dealer in debts and credits. He received for the most part money and loaned money, for that was the custom of the time, but from him has been evolved the banker who deals primarily in debts and credits and only incidentally in money.

The banker has become the bookkeeper and settling agent of the business world. The products of a locality, let us say the State of Georgia, move out to the markets of the world and create credits in favor of that locality on the books of

banking institutions in the commercial centers, while at the same time a counter movement of commodities is under way from other localities into Georgia, in like manner creating credits for those localities which are debits against Georgia. The practical effect is that the commodities moving between these communities are exchanged and pay for themselves, the running accounts being kept and settlements effected in the banks.

To illustrate the details: A dealer in cotton in Atlanta makes a sale to a mill in Fall River and receives in payment a cheque or draft drawn on a New York bank, which he deposits for the credit of his account in an Atlanta bank, and which the latter forwards for the credit of its bank account in New York. Meanwhile an Atlanta merchant has bought goods in New York and in order to pay for them buys from the Atlanta bank an order for the New York credit, and this when forwarded completes the circle of payments for cotton and goods.

If we would extend the investigation to include the bank accounts of the Fall River mill and the Atlanta dealer we would find, first, that the mill account was built up constantly by deposits of cheques and drafts received in payment for goods sold in all parts of the country and perhaps all over the world, with almost no deposits of cash, and that it was drawn down by cheques for raw cotton, and supplies and large amounts of cash for the pay-rolls; second, that the cotton dealer's account was built up entirely by deposits of cheques or drafts received for cotton shipments and drawn down by cheques and cash payments to farmers for cotton.

For payments at a distance and for large payments everywhere, bank credit in the form of a cheque or draft is used; for wages, payments to farmers and the retail trade, money is commonly used, but the practice of keeping a bank account and making payment by cheque constantly grows and encroaches upon the use of money in those fields. Moreover,

the "money" of retail transactions is usually only another form of credit—bank notes, government paper, or metal coined at an artificial value. Money as a mere medium of purchase is no more than a token or ticket or order for a certain value; even gold coin has no other significance in such use. We cannot do without gold as the measure of values, as the basis of our monetary system and as the money of international payments, but it is too costly to be used as a common instrument of retail trade.

During the panic of 1907 an amusing story went the rounds, of an Irishman who called at a bank to draw his deposit. The cashier offered him a clearing-house cheque and explained that it would be accepted everywhere and serve all the purposes of money. The Irishman listened attentively and said: "Yes, I understand; and if the baby at our house wakes up in the night and cries for milk I suppose I am to give him a milk ticket." We all laughed at the Irishman's wit, but

why? A man doesn't want a government note or a gold coin in the same sense that he wants food. He wants money for the same reason that he wants a milk ticket, as a means of getting something else.

The money which the banks supply to the Fall River mill and Atlanta dealer for pay-rolls and cotton purchases quickly finds its way into the tills of the town merchants and back into the banks to be used over again. If there was only one bank in a town and every payment from a car fare up was made by a ticket or note transferring credit in that bank, and there were no transactions with the outside world, and all tickets or notes were deposited at the close of each day, it is evident that the condition of the bank would be the same from day to day and the business of the community would "clear" itself. That is a microcosmic, though fore-shortened, picture of the trade relations of the world.

The banker setting up in business pays in a given amount of capital as a guaranty

of his own responsibility, establishes his connections in the principal commercial centers with which his community has relations, and invites customers. He receives some idle hoards, some money from customers engaged in the retail trade and provides such part of his capital in money as he thinks prudent, but the bulk of the deposits that flow over his counter consist of instruments of exchange, which make him the owner of credits on the books of various other banks far and near. gives the depositors credit on his own books in payment and undertakes to place credit at their disposal wherever they want it or to pay them the full amount in lawful money on demand. The latter is the perilous part of his undertaking, but the condition is peremptory. The efficiency and usefulness of a banking system depend upon the absolute and certain fulfillment of this undertaking to pay cash on demand. A banking system must be so organized that its individual members can pay cash, i. e., lawful money, on

demand, and the public must have confidence in their ability to do this beyond the possibility of failure, or the system is not fit for the vast responsibilities that devolve upon it. The task of gathering together the scattered credits which are daily assigned to him and of furnishing his customers with the credits they want at distant points is not difficult. Of one hundred men who come into the bank perhaps fifty will want to deposit drafts on distant cities and the other fifty will want to buy drafts on the same or other cities; he sells the latter what they want, transfers the deposited credits to meet them, and closes the day's business in practically the same condition as before.

The foregoing illustrates the movement of the exchanges constantly proceeding not only between the different communities of one country but between the communities of different countries. There is a network of relationship between banks through which each local community and market is connected with

all other communities and markets in the world. No locality is so remote as to be outside of the circle and no community's sales and purchases are so scattered but that they can be brought together in the settlements. Each bank is the center of a circle of which it is the clearing agent; all payments between its own customers may be made by a transfer of credit upon its books. If there are two banks or more banks in a town, all payments between their customers are resolved into offsets between these banks, and in like manner all payments between localities are resolved into offsets between banks, and if not settled in local centers are passed up to larger and larger clearing centers until they reach New York for this country or London, the recognized clearing center of the world.

But while the cross-payments of trade may be depended upon in the long run to balance and settle themselves, it does not follow that they will do so from day to day, or that they coincide so closely that

payments in money are never required. An individual's sales and purchases are seldom made at the same time, and the sales and purchases of communities are not constantly balanced. The trade of a one-crop farming district will not be so evenly balanced as one of a district in which mixed farming prevails, and in every industry there are periods, usually recurring every year, when the payments exceed the current income, and corresponding periods when income exceeds outgo. This means in the case of the individual that at one time he is building up his credit balance with his banker and at another time drawing it down, and, unless he has more capital in his business than he can employ constantly, he will be wanting to borrow credit. And so a region like the cotton states, whose products move quickly to market, may have large credit balances at one season and at another be wanting to borrow.

In fact, these fluctuations are always occurring and they furnish the banker his

opportunity for profit. The banker is an equalizing agency in the situation. He stands in the breach: he must either supply the missing offsets of credit, or, as a last resort make the payments in money. We have seen that if the exchanges are running in favor of an individual because he is temporarily receiving more than his average of payments he will necessarily be piling up a credit balance with his banker, thus supplying the latter with lending power to aid some one who is a debtor in the exchanges. If a farmer sells his crop and receives his year's income at once in shape of a bank credit, he has the privilege of drawing upon it until it is exhausted, but the fact that he will receive no more for a year practically compels him to make it last throughout that time. Meanwhile the purchasing power of his crop is in the hands of the bank and may be loaned under conditions that will secure its return as fast as the farmer, or the average of a hundred such depositors, will call for it. Evidently the

fact that the farmer accepts the bank's credit as cash, although he will actually use it in installments throughout the year. has served to spread the purchase and distribution of the crop over the year. And for this use of the bank's credit the borrower pays interest. He might have made an arrangement to buy the crop of the farmer direct and pay in installments, but the farmer prefers a closed transaction and a credit in bank subject to cheque.

Not only has the banker the power to loan the credits which his customers have transferred to him, but he has the right to create new credits for his customers in exchange for their notes, thus expanding the total volume of credit. This power gives an elasticity to banking facilities which they would not otherwise possess. The only limitation upon this creation of credit, or purchasing power, is the everpresent requirement that all cash credits must be liquidated in lawful money on demand. This possible demand for cash

in uncertain amounts is the sword of Damocles that hangs over the banker's head.

The entire system of settlements, with transfers and offsets and advances and interchange of capital and credit, is exceedingly interesting and wonderfully simple and effective, but depends for its effectiveness upon a scrupulous observance of the principle upon which it is based. That principle is the natural reciprocity of trade. If one set of customers are for a time receiving payments in excess of the average due them and thus piling up balances that may be temporarily used the banker is bound to remember that later these customers must receive less than their average and will not only need to use the credit that is due them but be borrowers in their turn. These inflexible conditions circumscribe banker and dictate the character of the loans he may make. Credit should never be a substitute for capital, at least not in the banking business; it should always be

the representative of capital and never get far from its principal. The credit used in the exchanges should be based upon capital employed in the exchanges, with constant liquidation and interchange of the two. The idle credit upon the books of the bank today may be used to move wheat to market or to weave cotton into cloth, in confidence that in a few weeks or months at the latest this property will be converted back into credit and be available for use elsewhere. It cannot be safely used for the construction of a building or the purchase of machinery. however satisfactory the annual returns from such investments may be, because the nature of the property gives no assurance as to when the principal will be returned.

It is not strange that with banking an open and competitive business, these essential conditions should not always be observed and that occasionally a banker should fail in the supreme test—ability to meet all demands in cash. And as Credit,

with all the potency that it borrows from Capital, is itself an intangible thing, mere opinion, that a whisper may destroy, with the interdependence that exists between bankers and between bankers and customers, such failures may easily have farreaching and disastrous effects. The very economies of the system, the manner in which each man's credit and capital are merged in the common fund in order that all our productive powers may be completely employed, are responsible for an all-pervading sensitiveness, which is the most serious weakness of the system. The moment apprehension becomes general the effectiveness of the system is destroyed.

While there are balances from time to time in the exchanges between countries, and between different localities of the same country, which cannot be settled without shipments of money, they are usually met without inconvenience unless there is a disturbance of credit. All demands but those arising from alarm about

credits can be estimated, and credit can be more or less used in meeting them, the adjustment in such cases being chiefly a question of the price to be paid for whatever accommodations are wanted. In some instances, however, the facilities or restrictions of the banking system in respect to the use of the various forms of credit determine whether money must be moved or not.

The movement of the crops each year in the United States requires an important movement of money from the centers to the agricultural districts, but this is not so much in settlement of a trade balance as to provide a medium of making payments to farmers. As they adopt the custom of keeping bank accounts and giving and receiving cheques this demand for money will decline, or if we had a scientific bank note system it could be met with that form of bank credit.

A crop failure may deprive a locality of the usual supply of commodities upon which it depends to make good its side

of the exchanges. Its buying, although possibly restricted, goes on, and eventually the balances must be made good by the sale of property or the negotiation of outside loans, or the bankers must ship out money. A few years ago the southwestern states of this country suffered from a severe drought. The crops were a partial failure and the usual shipments could not be made. Moreover it was necessary to ship grain in to feed the stock on the farms. The balances were naturally against the bankers of that section. The forehanded farmer who had a credit balance at the bank had a right to draw on it to buy grain, and it was for the bank to find the means of meeting the draft. It could call on the farmers who were its debtors to ship their stock or any other movable property, to market, or to mortgage their farms to outside loan companies if they were not already mortgaged, or it could borrow of an outside correspondent on its own credit, or after exhausting its cash reserves it could close

its doors and wind up business; and all of these things were done. Some method by which an outside supply of credit could be made available to the local banks would tide such a community over its emergency.

In the several years immediately preceding 1897 the agitation over our standard of value created alarm among foreign holders of our securities and caused the latter to be sent home in large quantities, thus creating adverse balances for us and forcing the shipment of gold in settlement. In that case we could not interpose our credit to stop the drain, for it was the impairment of our credit that was causing the movement.

One of the most notable movements of gold that ever occurred was that from London and the continent of Europe to the United States in the last two months of 1907. Conditions in Europe throughout the year had been such that the banks were reluctant to lose gold, and had raised every possible obstacle to its going, but in

November a combination of circumstances made all opposition useless. The crop movement in the United States was on and European buyers wanted the commodities. The panic in this country put such pressure on the banks for cash that they used pressure to hasten the crop forward: the demoralization in trade resulting from the panic was so great that importers cancelled many of their foreign orders for goods. The security markets of this country were so low that European investors improved the opportunity to buy heavily of our stocks; and, finally, the suspension of cash payments created a premium upon money which furnished an additional incentive to import gold. Altogether the forces were irresistible and over \$100,000,000 in gold was transferred to this country. Here again it is to be noted that the conditions were abnormal and due primarily to a breakdown of credit, and that this breakdown occurred not in the countries from which the gold was moving but in the country to which it was taken. The operations of our banking system were interrupted by panic and the only means of restoring confidence and order was by the importation of gold.

It will be seen that practically the only interruptions that occur in the regular and satisfactory flow of the exchanges through the banks, or to the performance of any of the banking functions upon which the business community has learned to rely, have been due to apprehensions about the integrity of credit. These apprehensions relate at first to only a few banking institutions but spread until all are directly or indirectly affected, and regardless of whether there is basis for suspicions or not. Experience has shown that the problem of preventing these disturbances is largely a question of bringing some higher or better known credit to the support of the particular factor which is threatened. How this may be effectually done will be considered later.

A simple statement of the functions of

banking should be sufficient to convince every one that they are useful, legitimate and indispensable, and based upon principles fundamentally sound. The banking business does not sit at the cross-roads of the exchanges to take toll by any legerdemain, or by any privilege or monopoly, or in any sense as a non-producer. Its services are as distinct and creative as those of any industry and the benefits are distributed to all the consumers of the commodities handled by the exchanges. It is a business that never can be a monopoly, for it controls no natural resource or opportunity; its earnings are from current business and its customers are alternately debtors and creditors and must be satisfied in both relationships or they can easily form new connections.

The problem of perfecting the banking system to enable these functions to be performed with greater economy, efficiency and certainty is not a problem of helping bankers but of perfecting the organization of society.

## STORY OF NATIONAL BANKS

Two considerations of great importance were named by the Secretary of the Treasury, Salmon P. Chase, in his original proposal for a national banking system, submitted to Congress December 9, 1861. One was to provide the country with a national currency, secured as to redemption by the bonds of the Government itself, which would circulate at a uniform value in all sections; the other was to create a new demand for the bonds which the necessities of the Civil War were compelling the Government to offer in large amounts, and on which up to that date, the net interest charge was more than six per cent. per annum. The men who designed the National Banking system of the United States tried to serve two masters. result has its unfortunate side. tried to serve the people by designing

what they hoped would be a sound, wellguarded, effective banking system. the same time they tried to serve the Government by creating a fictitious market for a vast amount of Government bonds. It may be well within probability that the fundamental errors contained in the banking act in the half century during which they have hampered our domestic development and fettered our advance to the position we are entitled to occupy in world finance, have cost the people of this country as much in dollars as did the war that gave rise to those legislative errors. The cost of a bad banking system, in a nation of such vast and active commercial resources as ours, is really incalculable. We have through most of our history grown commercially in spite of bad banking laws. Unresponsive and inadequate as our banking act is, it still was a great improvement over the bad legislation that had created most of the State banking systems in the period of complicated unsoundness and inadequacy that preceded the enactment of the National Bank Act.

The common currency of the country at that time was State bank notes, the value of which, as the Secretary of the Treasury said, was "dependent upon the laws of thirty-six States, and the character of some sixteen hundred private corporations." So far as the proposal had in view the improvement of banking conditions it related almost exclusively to regulation of bank note currency, and so great was the need for reform in this respect that Alphonso Taft, of Cincinnati, father of President William Howard Taft, writing to Secretary Chase two days after the report was published, expressed the opinion that "if Congress would adopt his recommendations for a national currency that in itself would be no inconsiderable compensation for the War."

Prior to the establishment of the national banking system the bank note was the most familiar form of bank credit in

the United States, as it still is in many countries today. The first extensive use of bank credit everywhere was in the form of circulating notes; the chequing account, which has become so common with us, being a later development. There were various reasons, in the earlier development of banking facilities, why the note should be preferred. The individual would find bank notes more generally acceptable than his private cheque. The bank's credit was more widely known than his own. Comparatively few people had bank accounts and people preferred to receive payment in something that could be paid out directly without inconvenience. The bank note was a means of extending the use of bank credit to a large class of people who otherwise would not employ it at all. A bank accepted the note of a customer, with such security as it might exact, and gave in return its own notes payable in coin on demand and printed in denominations convenient for use as money. The borrower made his

payments with these and the recipient, instead of presenting them for redemption, likewise paid them out as money, and so they were passed on from hand to hand as a substitute for coin. Upon a given amount of coin reserves it was possible to keep in circulation a much larger amount of notes. The excess represented bank credit doing the work of capital.

It is significant of banking practice at the time the Bank of England was founded that its promoters thought they had secured a practical monopoly of the business by a provision in the charter which forbade any other company of six members or more to issue promissory notes payable on demand. It was not until 1833 that the first corporation was organized in England to do a deposit and discount business without the currency accompaniment. Up to that time it had not appeared practicable to use cheques instead of bank notes in common transactions. It was the restriction placed upon

note issues in England in 1844 and in this country by the National Bank Act which developed the use of the cheque in these countries so far beyond its use elsewhere. In France, Germany, and the other countries of Europe, to the present time, the bank note is still the popular medium of payment.

The National Bank Act, as we shall see, effected a radical change in the character of the bank note. The currency privilege had been so abominably abused under many of the old State bank systems that the true function of a bank currency has been almost totally obscured in this country. The bank note in its ideal capacity belongs in a class with the bank cheque and the bank draft, as a free, unfettered instrument for transferring bank credit. The National Bank Act put it practically in a class with the government note, as a fixed form of currency. In doing that there was a fundamental failure to grasp the true function of the bank note.

The bank note is the natural complement of the cheque in deposit banking. It enables a bank or banking system readily to convert deposits into circulating notes, and thus furnish the community with currency by simply changing the form of its obligations, and in perfect response to the community's needs. Let us take for an illustration the case of a manufacturer, who sells his goods at wholesale and receives practically his entire income in cheques and drafts, for which he receives credit in his bank account. He pays for his supplies usually by drawing cheques on that account. But when it comes to his pay-roll that method is not satisfactory because the wage-earner objects to taking the time and trouble during banking hours to get these cheques cashed. The employer accordingly calls upon banker for money for the pay-rolls. draws a cheque for the full amount and the banker, if permitted by law to do so, would supply the sum in the bank's own notes. This simply changes the form of

the bank's obligation from a deposit promise to a note promise. The wageearners receive these notes, pay them out to merchants, landlords and others, with net result that, within a few days, most of them reappear at the bank as deposits. The bank is now in the position it was before the notes were issued except that a certain amount of credit has been transferred from the manufacturer's account to the accounts of sundry other depositors. In no other conceivable way can this class of payments be so easily and economically handled. They are typical of local payments generally. The notes represent no investment while they are idle in the banker's safe. While they are outstanding adequate reserve of coin is kept against them. The instant they return to the bank they cease to be a charge.

Compare this with the use of gold coin for the pay-rolls; the coin makes the same rounds and renders no better service. But, at every stage of its existence, whether in a banker's vault or in circulation, coin represents an investment at its face value. The interest on that investment is a constant charge on the exchanges.

It is evident also that there is a perfect adjustment of the volume of such a bank currency to the calls of the community for cash.

The notes are interchangeable with the deposit credits in any amount without disturbance. The public is able to use personal cheques, bank currency or bank drafts, as best suits the kind of payments to be made. The three forms of bank credit cover every variety of payment in domestic trade. They are all of the same species and together make a complete set of instruments for the transfer of credit. in a system the essential principle of which is that such credits, when brought together in the clearing-houses, will balance and settle themselves.

Experience has shown, however, that while a bank's liability is the same whether a customer takes his credit in the form of a deposit subject to cheque or in the bank's own circulating notes, there is more danger of abuse in the latter method of creating credit than in the former. The reason is that the note liability is somewhat obscured by the use of the notes as a common currency; the notes are scattered far and wide, often by design, and nobody is sufficiently interested in sending them home for redemption to make that an effective check upon overissues. On the other hand a cheque drawn upon a deposit account, appears immediately at the counter of the bank and, if not completely effective in preventing undue expansion, is an influence to that end.

The world's experience with bank currency, therefore, while demonstrating that it has a function in the exchanges that no other form of credit, not even standard money, can perform, has caused nearly all countries to place restrictions upon it. In most of them the power of issue is now confined to a single institution and exercised under close governmental

supervision, this institution being charged with the responsibility of maintaining an adequate gold reserve and supplying all the banks with currency as they need it. The elasticity of the currency is thus in a large degree preserved while effective safeguards are placed about its issue.

The movement in the United States to restrict and control bank currency was a part of a world-wide movement. But in this country the resulting system was shaped by influences that did not exist elsewhere. The purposes held by the founders of the national banking system were realized. It created a market for large amounts of government bonds and eventually made possible a reduction of the interest on the public debt to the lowest rate ever reached in any country upon any class of securities. It gave us a truly national currency, every note good without question or discount in every part of the country. These were very great and perfectly obvious benefits. The superiority of the new currency was especially appreciated by the public, for the defects of the old system were a daily vexation to everybody. Naturally the national system, compared with what had preceded it, became firmly established in the confidence of the country.

Now, of course it is of the first importance that a currency shall be safe. But it is of scarcely less importance that it shall be efficient for the particular service it is expected to perform. The trouble with the national banking system is that its authors were so intent upon other aims that they lost sight of the essential function of a bank currency, which is to supply an elastic element in the monetary stock.

The fundamental question in dealing with currency is whether or not there is any natural relation between currency and banking. One of the results of the movement to restrict bank issues was the development of a considerable body of opinion in support of the idea that banking should be confined strictly

to receiving deposits and making loans; that it should have nothing to do with issuing currency. In England this view became strong enough to change the constitution of the Bank of England, but its advocates there contended only that the banks should do business with gold or notes that represented an equal amount of gold. In this country the idea was greatly encouraged by the issue of United States notes in the form of currency. the light of this example there developed a party which argued that the issue of money, or anything that had the semblance of money, was an act of sovereignty; that government notes should take the place of all bank notes. One of the most distinguished opponents of a bank note currency responding to an opinion that the government should retire the legal-tender notes and "get out of the banking business," epitomized the opposition by retorting that the banks should retire their currency notes and "get out of the government business." Here then

is the vital and debatable point in the currency discussion. Is there such a necessary relationship or mutual interdependence between the functions of banking and the functions of a currency system that the two sets of functions must be coordinated in order that either may be successfully performed? That is precisely the contention of those who believe in an elastic bank currency.

There is no real issue over the question of "sovereignty" in this connection. Unquestionably the government must fix the standard of value and determine what shall be legal-tender, and nothing else is real money.

It is agreed also that the government should regulate and supervise all forms of private or corporate credit designed for use as currency, in order to enforce its redemption in gold on demand. Here, however, we approach the limits, not perhaps of the government's authority, but certainly of its ability to perform the function of supplying currency in the

volume, at the time, and in the place, required by the changing conditions that affect the business world.

Neither the government officials who come and go at Washington, nor any other authority, can determine in advance how much currency will be required from time to time. Nobody knows how much currency the people of this country will call for next year or even next month. Nobody can tell within hundreds of millions of dollars what the crops of the country will be worth, or what the volume of trade will be next year, or how much of that business will be handled by means of cheques and drafts and how much will require currency; nor can any one tell. what part of the \$16,000,000,000 of bank deposits in the United States may be called for in cash at any time. All of these demands are uncertain and fluctuating. They are directed, not to the Government, not to the offices of the Treasury, but to the banks. Not until the Government receives deposits and makes loans

and enters upon all the functions of banking, will it be in position to measure the demand for currency or to supply it direct. Until then, wherever the authority for issue may be lodged, all supplies must reach the public through the banks.

On the other hand, the banks are expected to supply currency to meet all the fluctuating demands of trade. They are required to pay lawful money or a currency acceptable in its stead for all their deposit liabilities on demand, or confess insolvency. Is there no relationship between this obligation and the function which would enable them to meet it?

The volume of currency cannot be responsive to the needs of trade unless it may be based upon the credit of the traders who use it, backed of course, by the commodities which are moving. If wanted to move grain it must be based upon the credit of the dealer and the value of the grain, and if wanted for merchants or manufacturers it must be based upon their credit and their goods and materials

in stock. Neither a grain dealer nor merchant can give government bonds as security unless he is something more than a grain-dealer or merchant; nor can the banker who supplies him with credit give bonds as security unless he is something more than a banker. The banker has no security to offer except what he receives from his customers, and there can be no elasticity in the currency, or certainty that a banking system will meet its obligations, or sure basis for public confidence in time of strain, unless currency can be created upon banking assets.

The requirement that national bank notes shall be secured by government bonds takes them out of the class of responsive currencies. The volume of these notes is determined by conditions utterly foreign to the conditions of trade. There is no connection or relationship between the amount of currency a country needs and the amount of its public debt. It has frequently happened that a period of national prosperity and large revenues has

caused a reduction of the public debt at the very time when a larger volume of currency was required. On the other hand a great war might cause an increase in the debt that would make the currency privilege a menace to our monetary system.

This arbitrary restriction upon bank currency has compelled the banks of this country to do business without any element in the monetary stock that was readily adaptable to the varying demands upon them for currency. The trade of the country fluctuates from time to time, reaching its greatest activity each year during the autumn months. The principal crops are then being moved to market; farmers demand cash, particularly in the case of cotton, which moves rapidly. Large sums of currency, therefore, must be withdrawn from the banks of the central cities. It is a matter of indifference to the farmer whether the currency he needs in the crop moving operation is in the form of a secure bank note or in money

that might be the basis of a bank's cash reserve. But it is a matter of the most vital importance to the community served by the bank whether or not it can perform this service by parting with its credit or whether it must invade its cash reserves and consequently shrink the whole credit structure which stands on that stock of reserve money. The fall of the year is the period of heaviest retail trade. The money withdrawn from the banks passes to the farmers and thence from hand to hand discharging local obligations, eventually reaching the local banks and ultimately finding its way back to the centers after the holidays. Clearly the country needs a great deal more money during the fall months than at any other season, but the supply does not adjust itself to this condition unless the pressure is great enough to force the importation of gold.

There are several reasons why gold does not move readily enough to supply the desired elasticity in our monetary stock. In the first place our command

over gold depends upon numerous conditions that are beyond our control, such as the balance of trade, movement of securities, state of foreign trade and markets, and the attitude of foreign bankers. The season of active trade with us coincides closely with the season of activity in Europe, so that we want more money at the same time they do. Furthermore, if we want it because financial conditions are threatening, the markets of the world are now so closely related that the foreign banker will cling to it for the same reason. When in 1907 we finally broke down all barriers and drew away from Europe heavy supplies of gold, great sacrifices were necessary to accomplish it. Finally, the cost of transporting gold across the ocean and back again in a few weeks, with the loss of interest while in transit, is a heavy charge for a temporary use. The result of these conditions is that this country usually experiences a sharp stringency in the autumn months. Neither money nor credit is available to

handle the business of the country to the best advantage. The banks encroach upon their reserves, advance the interest rate to discourage the demand for loans and curtail accommodations as closely as possible. The business public neglects cash discounts, puts creditors off with promises and adjusts itself as best it can to a situation which always involves more or less stress, sacrifice and danger.

It is often said in criticism of the bankers that as these conditions are repeated annually they should provide for them by entering the active season with larger reserves. The individual banker, however, has but little influence upon the situation. He is controlled by competitive conditions. There can be no unity of purpose or common policy as the system is now constituted. Moreover, there is something obviously wrong in the proposal that large sums of capital shall be kept idle during eight months of the year in order that they may be used as common retail currency during the other four

months. If the large transactions of the business world are settled with bank credit it ought to be possible to finance the local trade without passing gold from hand to hand.

But the climax of the system's incapacity and helplessness is seen in the recurring periods of panic when practically the entire banking service of the country confesses its inability to meet the universal test of bank solvency, to wit: the payment of cash on demand.

Although panics never disturb the credit of national bank notes the national banking system has not been able to protect itself, or the public against these disasters. Its \$700,000,000 of outstanding notes are secured but its \$7,000,000,000 of deposits, practically all payable on demand, are not only unsecured, they are unsupported by any system providing for their ready liquidation. The wisdom of the ostrich which sticks its head in the sand at the approach of danger has its parallel in the fancied security of the na-

tional banking system because its notes are protected.

Even this statement does not disclose the entire situation. In addition to the \$7,000,000,000 of deposits in national banks there are \$9,000,000,000 of deposits in banks operating under state charters. That means, in all approximately \$16,-000,000,000 of bank credit dependent upon the responsibility of 23,000 banks (scattered over 51 States and Territories) and upon popular confidence in their individual ability to pay cash on demand. Clearly there is no lack of material for panics to work on, although the national bank notes are secured. When in addition it is remembered that the total amount of cash, held by the banks against these deposits, is less than \$1,500,000,000, and that the total stock of money in the United States is estimated at less than \$3,500,000,000, half of it being gold, there is no mystery about why we have bank panics while other countries do not. In all other countries the banks have the power to use their ordinary assets as a basis for currency. Even the Bank of England, notwithstanding the Peel Act, in an emergency is allowed to do this. It has repeatedly suspended the bank charter to do it, and the assurance that it will do so, when necessary, is as effective as a statute.

A simple statement of these facts is sufficient to expose the weakness of our banking situation. Public confidence, to be as stable and unquestioning as it is abroad, must have the same basis it has there, to-wit, a knowledge that the banks are equipped to meet any demands that may possibly come upon them. It is common knowledge that our banks are not. They have no means of defending themselves or of demonstrating their solvency.

The inherent weakness of the banking situation in this country lies in the fact that it includes so many—23,000 or more—independent and unrelated institutions competing actively with each other and,

except for the degree of unlegalized cooperation developed in the Clearing-House Associations, without any coherent organization or leadership. It is apparent that the situation is radically different with regard to the practicability of voluntary co-operation and mutual support than it is, for example, in the British Isles, where there are less than 200 banking corporations with over 8,000 branch offices. It is probably true that our numerous banks, owned and managed in the communities where they are located, are less rigid in their rules of business and more responsive to local wants than the branch offices of large outside corporations would be. On the other hand, there is the danger that this responsiveness everywhere to local conditions may be without proper regard for general conditions which may be all important; that the banking situation as a whole suffers for want of the larger view. It is also true that with so many individual units in the system there cannot possibly be as

high an average of experience and ability in the management as will be found, for example, in the twenty-nine banking corporations of Canada.

This system of independent local banks has its advantages and is undoubtedly permanent in the United States. But without some organized means of co-operation and mutual support these isolated institutions are not only helpless in time of danger, they are a menace to each other. Some of them are certain to be imprudently or dishonestly managed and, under pressure, will succumb.

Every failure at a time when credit is known to be under strain creates more distrust. The pressure upon others, unprepared to bear it, increases. The alarm heightens and spreads until the entire system is prostrate.

But the most disastrous effects and the most striking evidence of the constitutional weakness of the system are seen in the struggles of the individual banks to protect themselves at the expense of each

other in every emergency when their strength should be united. The banks lead in a scramble for cash which cannot possibly strengthen the situation as a whole. In fact, it actually hurries on the crisis. At the very time when it is of the highest importance to support credit individual bankers curtail credit by the most drastic methods. And just when it is of the highest importance that the limited supply of money shall circulate with the greatest possible rapidity they seize every dollar within reach and lock it up. In short, the efforts which each bank will naturally make for self-protection in time of panic, and for the most of them the only efforts they can make, are such as must intensify the general alarm.

A banking system should be a source of strength and support to the business community in times of financial strain. It is a recognized principle of banking that in a time of panic, when credit throughout the community is shaken, the banks should show the utmost liberality

in extending credit to all who are entitled to have it. There is no limit to which demoralization may not go in the excitement of general alarm, unless solvent houses may obtain their usual accommodations. On the other hand, the steadying influence in every crisis is the buying power of people who have credit in reserve and are influenced by the unusual conditions to come into the market and use it. The banking system is the organthrough which these reserve powers are exercised. When that organization breaks down or refuses to perform its usual function demoralization is complete. Nothing could be more unfortunate when alarm prevails and reaction is under way than for the banks to be forcing the collection of loans in order to make a showing of individual strength or for the purpose of liquidating deposits. There should be some other means of satisfying the anxieties of depositors than by prostrating the business community to do it.

We have seen that bank credit is a factor of constantly increasing importance in the business world. The necessity for a metallic basis for that credit is not in dispute, but the credit transfers through the Clearing-Houses of 100 cities in 1910 were one hundred times the total stock of gold in the country. The trade of the world is settled through the banks in reliance upon their solvency; industry and commerce are financed upon bank credit to such an extent that the orderly course of business is dependent upon its stability. Always excepting the integrity of the standard of value itself, there is nothing so vital to the business community as that this vast fabric of credit shall be properly supported.

The importance of protecting bank credit in the form of bank notes has long been recognized, but in the development of banking in the United States since the national system was established, the book liabilities of the banks, from being less than the note liabilities, have become twenty times the note liabilities. It used to

be argued that bank notes were a form of credit which should be especially guarded because they were a common currency and the means by which wages were paid. Without qualifying in the slightest the demand for a safe currency it should be added that there is no darker day for the wage-earner than when the banks suspend the payment of deposits and begin a hurried collection of loans. The amount of currency he has in his pocket is not more important to him than regular employment. A persistent demand for the withdrawal of deposits in cash means that the entire system by which industry and commerce is supported is going to pieces.

It is a fundamental condition of banking that a bank shall pay cash on demand. It is this condition that makes bank credit the highest and most available form of credit. If a single bank fails to meet this test its doors close in ruin and disgrace. Yet the entire banking system of this country may be forced to suspend payment, with inestimable confusion and injury to all business interests, because no

system exists for creating an acceptable currency upon bank assets.

It is not to be supposed that the country will go back to unrestricted note issues based upon the individual responsibility of 23,000 or even 7,000 banks; it is impossible for such a division of responsibility to command unwavering confidence. But nobody ever believes that any considerable proportion of these banks are insolvent and it is safe to say that to whatever extent they pledge their credit together it will be unquestioned. The problem of banking reform is to provide a higher form of credit that can be quickly substituted for any particular credit that is threatened. The highest possible form of credit, readily available in any sum required, is a bank note currency based upon the united assets of a national system. When each individual bank in the system can depend upon securing currency of this kind, to the extent of its own approved assets, bank credit in the United States will be safe from any general panic.

## SAFEGUARDS AGAINST PANICS.

The panic of 1907 afforded a convincing demonstration of the inherent weakness of the banking organization in the United States, and awakened for the first time a general interest in proposals for currency reform. The panic of 1893 had occasioned some agitation of the subject and the American Bankers' Association, meeting at Baltimore in 1894, adopted recommendations looking to a more liberal system of bank issues. What was known as the Baltimore plan contemplated issues by all the national banks against their general assets instead of against government bonds or other specified security. In all the later discussion of the subject this class of issues has been known as "asset currency." The silver agitation which came about that time postponed the bank note question and

little progress was made for ten years more.

In 1906 the American Bankers' Association appointed a commission to deal with the subject and in 1907 it ratified the action of the commission, which favored issues by all the national banks upon general assets. At that time, however, it was apparent that strong opposition existed among bankers as well as in Congress to a system of unsecured issues by thousands of institutions.

At this stage of the agitation came the panic of 1907. To the average business man it was like a bolt of lightning from a clear sky. The country was prosperous, crops were good, industries were busy and trade was in a healthy and well-balanced condition. That credits were not generally over-extended was proven by the comparatively small number of failures, despite the tremendous shock and strain of the panic. The crisis came at the season of the year when the legitimate demands for money and credit were at

the highest. Conditions abroad were unfavorable to the importation of gold and, with no facilities at their command for increasing the supply of currency, the banks of the central reserve cities were unavoidably below their legal reserves of cash and in no position to withstand additional and extraordinary demands.

Up to this time the situation, although strained, was not exceptional for that season of the year, and what followed in 1907 might as well have occurred in 1906 or 1905 or at any time when the banking resources of the country were fully employed. As it happened at this critical juncture in 1907, events transpired which created a "run" upon certain banking institutions in New York City, and the newspaper reports of this started a general movement by banks in the interior to withdraw funds from New York. partly to strengthen their own cash holdings and partly no doubt in anticipation of what actually followed, to-wit, the restriction of cash shipments by the New York banks.

With no means at their command for converting their assets into currency, and facing a demand of immeasurable proportions, the banks of New York City were obliged as a choice of evils to place restrictions upon cash payments; the banks of the other central reserve and reserve cities found it immediately necessary to do the same, and the country banks generally felt compelled to follow their example. It is unnecessary to dwell here upon the enormous cost to the country of the industrial disorganization which followed.

Confronted by this emergency and facing the necessity of satisfying by some means the calls of the public for a circulating medium, the banks acting together through the clearing-houses and other similar organizations, proceeded to improvise an emergency currency, acceptable for local use. The public with a most creditable appreciation of the situa-

tion, accepted these makeshifts as unavoidable; confidence in the banks was restored by their associated action, and gradually normal conditions were reestablished.

The lessons of this experience were not lost. A demonstration had been afforded, not only of the weakness of our banking system while its individual members were isolated and struggling against each other, but of its invincible strength when the banks united their credit and adopted a common policy. It was quickly recognized that a remedy for banking crises had been found without going back to the distrusted system of unsecured individual bank issues. The banks should be organized into an effective system and the system equipped with the power and the instrumentalities to protect and support its individual members.

The first expression of this new policy in the form of a statute is found in the Aldrich-Vreeland act, a measure avowedly temporary in character, but containing the germ of a new system. Its leading feature is the provision under which the Comptroller of the Currency, with the approval of the Secretary of the Treasury, may issue currency upon the security of certain bonds, but it carries as a subordinate feature a provision by which the banks may form local currency associations and these associations may receive approved assets from their individual members and issue currency upon them. The Aldrich-Vreeland act is a cross-over track from the bond-secured currency system of the national banking act to a system of currency issues based upon commercial assets.

One of the features of the Aldrich-Vreeland act was a provision for a Monetary Commission of eighteen members of whom Senator Aldrich and Mr. Vreeland, joint authors of the Aldrich-Vreeland act, are influential members. Senator Aldrich as Chairman has submitted a tentative draft of a plan which, subject to some suggested modifications, has been

formally approved by the Executive Council of the American Bankers' Association.

The first thing to be said of this plan is that it follows, develops and legalizes the same general procedure to which the banks themselves resorted by common consent in 1907. The clearing-house cheques of 1907, notwithstanding the haste and informality of issue, proved to be as safe a currency as national bank notes, with the advantage of being based upon the natural assets of a commercial bank, but they had no legal status or national character and could not be used in the settlement of balances between localities.

The Commission's plan, adopting the same principle of issue but seeking to unite all of the banks into one system for the exercise of this function, would provide a national currency under certain definite safeguards which experience has shown should always surround issues of paper money.

It is proposed to form what shall be called the National Reserve Association of America, the capital of which shall be provided entirely by the banking institutions of this country. No other subscriptions will be received and the banks will be allowed to subscribe or acquire stock only in a fixed pro-rata of their capital. The authorized capital of the Reserve Association is to be 20 per cent. of the capital of all the banks joining it, each bank subscribing that percentage of its own capital. In case a bank increases or diminishes its capital its shares in the Reserve Association will be increased or diminished accordingly. One-half of the subscribed capital will be called in at first, and the remainder will probably never be called for, but the subscriptions will stand as a liability of the banks and thus serve to fortify the credit and prestige of the institution in the eyes of the world. Assuming that the banks generally come into it, the National Reserve Association would be much the strongest organization in the world for the performance of banking functions.

It is proposed to allow the Reserve Association to pay dividends upon its outstanding shares up to five per cent. per annum; after which, and after the accumulation of a given surplus, all profits are to be turned into the Treasury of the United States. This disposition of the earnings is consistent with the theory upon which the Association is formed, viz: That it is not an institution for profit, but an association of banks for mutual support and assistance in their service to their local communities, and to enable the banking system as a whole to discharge certain public functions which the individual banks cannot so effectively perform.

The organization of the Reserve Association is modeled after our federal form of government. It begins at the bottom with local bank associations, which must consist of not less than ten banks and not less than \$5,000,000 of combined capital and surplus; then the entire country is

divided into fifteen districts and the local associations of each district are organized into a district association; and finally the National Reserve Association, with its head office in Washington, is founded upon the district associations. The control of the local associations is wholly within themselves; the members elect their own directors and the directors for each district are elected by the banks within that district, and, finally, all of the districts participate in the election of directors for the national association. The plan of choosing directors is ingeniously devised throughout to give the small banks more influence than they would have if their voting power was based upon their holdings of capital stock in the Association. In the local associations, for example, three-fifths of the directors are elected by allowing each bank in the association one vote regardless of its size, while the other two-fifths elected by allowing each bank to cast as many votes as it has shares in the association. A similar plan is followed in electing directors of the district and national associations.

It is interesting in this connection to examine the statistics given in the last report of the Comptroller of the Currency as to the number and capital of national banks:

*	Number.	Capital.
All National Banks	. 7,173	\$1,002,735,123
Under \$100,000 capital		183,640,108
Of \$100,000 capital Of \$500,000 and over \$100,00		124,700,000
capital		267,525,000
Total of \$500,000 and	d.	
under	. 6,869	575,865,108
Over \$500,000 capital	304	426,870,015

It is apparent that the great number of small banks would give them a predominating influence in choosing a majority of the directors. A majority of all the capital of national banks is in banks of \$500,000 capital and less. If the State banks generally come into the system the strength of the small banks would be further increased. It is also to be noted in considering the relative influence of small and large banks that the latter are

grouped in a few central cities and that in any possible arrangement of fifteen districts most of the latter would be controlled by the banks of moderate capital. It would seem to be clear that the small and medium-sized banks would have ample representation in the management of the Reserve Association.

Provision is made that the district and national boards shall each have a number of members chosen from outside of the banking business who shall fairly represent the industrial, commercial and agricultural interests.

The national board, which will be composed of forty-five members, is to contain six ex-officio members, to wit: The governor of the Reserve Association, who shall be chairman of the board; two deputy governors, the Secretary of the Treasury, the Secretary of the Department of Commerce and Labor, and the Comptroller of the Currency. An executive committee of nine members is to have the powers of the full board and of

these, four, namely, the governor, two deputies, and the Comptroller of the Currency, are appointed by the President of the United States and serve as representatives of the public. As submitted, therefore, the plan contemplates that a very large degree of control will be exercised by the Government, that complete publicity will be given to its affairs and that the institution will be essentially a public rather than private one in its character and responsibilities.

This is the general plan of the organization. Now what is the organization to do? The chief function entrusted to it is the holding of the reserves of the banks, the making of that fund mobile, and thus preventing the disastrous scramble for reserves by all the banks individually whenever there is financial stress. Next in importance is the function of issuing the notes of the Association for circulation as currency, based in part upon a gold reserve and in part upon short-time commercial paper. In other words, this or-

ganization is to be charged with the responsibility of giving elasticity to our currency supply. It will issue its notes by re-discounting commercial paper for the banks, and under some conditions by making direct loans to the banks upon collateral security. The note issuing power is exercised by the national association, but through the agency of the fifteen branches. It is desirable that these fifteen branches shall be directed by one responsible authority, rather than that they shall be in effect fifteen independent institutions. It is fundamental that any system of paper currency shall provide for the maintenance of proper relations between the volume of that currency and a gold reserve, and the experience of the world has shown that this is most certainly accomplished through one central authority and by its control over a uniform discount rate. The prestige and effectiveness of the gold reserve would be lost if it was divided among fifteen institutions; and the burden of meeting all demands would fall directly upon the one reserve at the port through which our financial intercourse with foreign countries is mainly carried on. It follows that we do not want fifteen new kinds of currencies or fifteen separate gold reserves, or fifteen sets of managers with conflicting policies and varying discount rates. There is the same necessity for a supreme authority in control of the national gold reserve as for one authority over all the Nation's forces of defense.

This centralization of authority as to one vital function does not, however, mean a centralization of control over banking facilities. The banks of all sections of the country will have the same freedom of action they have now and will go on making their own policies as they have in the past, and the field will be open to new competitors as heretofore. Furthermore, the banking business will be conducted with a greater sense of security and with more regular and stable policies than the individual banks have been able to main-

tain in the past. In brief, all of the present banking facilities of the country will remain, enlarged and strengthened, but when the powers of the Reserve Association are called upon they will be administered under one consistent policy, by rules which will make them equally available for all applicants. This is accomplished by regulations strictly defining the kinds of paper which the Reserve Association may receive, and providing that it shall re-discount all the paper of certain preferred classes that is offered and at a uniform rate.

The plan describes four distinct classes of paper which the National Association may receive. Two of these are distinctly preferred in that they may be received without the endorsement of the local association, but the conditions upon these classes are severe.

First, the association may re-discount notes and bills of exchange that arise out of commercial transactions; the first condition being that

they shall arise out of commercial trans-The term "commercial transactions. actions" means the class of transactions which are incidental to the regular exchanges of the country; the movement of the crops to market, the current distribution of goods and commodities to supply the consumptive demands of the people. This paper must not represent speculative transactions; it must not represent investment transactions, however conservative. Aside from the question of security, there are two reasons why paper representing fixed investments is barred; first, there is no definite limit to the amount of such offerings and, second, there is no natural or definite maturity for such paper. Its payment probably depends upon a speculative or investment demand instead of a consumptive demand. It is a primary condition of this plan, therefore, that no paper will be rediscounted save such as in the ordinary course of trade will be naturally liquidated at maturity.

If a merchant with an established trade and credit, and with ample capital for the ordinary requirements of his business, borrows at the season of the year when he lays in his heaviest stock and regularly pays out later as he reduces his stock; if a dealer in grain or produce borrows at the season when the crop moves from the producer's hands and pays out as it is distributed for consumption; if a manufacturer borrows at one season to acquire materials or to accumulate stock for the marketing season and pays out regularly at the latter time; these borrowings are of the class which are naturally liquidated within a definite period. They are the most desirable class of loans for a bank to have and the class of transactions from which they arise is the one which the community as a whole is most interested in having protected from interruptions. On the other hand, if money is borrowed to buy land or railway stocks or bonds or to build houses, no matter how good these investments may be, such borrowings are of another class and are expressly excluded from the privilege of re-discount by the Reserve Association, although they may under exceptional conditions be used as the basis of advances.

But the provision that the paper shall arise from commercial transactions is not the only restriction upon the first class of paper described. This paper must have not more than twenty-eight days to run. The effect of this provision is to make the applicants send in their short maturities first and keep the Reserve Association as liquid as possible. But even this is not all; this paper must have been made at least thirty days before it was offered to the Association for discount. The effect of this is to prevent the manufacture of paper for the occasion; is must be paper taken in the regular course of business. And, of course, all of this paper must be endorsed by the bank which is offering it.

The other class of paper which may be received by the National Association

without passing through the local association consists of what are known as acceptances. The only acceptances we have now are drafts drawn by one business house on another and accepted by the latter for payment at a future date; and we do not have many of these because our system of cash discounts induces the best houses to pay cash, borrowing if need be from their bankers. Abroad it is the common practice for banks to accept drafts for their customers, making a small charge, commonly one-quarter of one per cent. for the service, after which the paper is sold on the market. Furthermore, the popularity of this kind of paper abroad has resulted in the development of an intermediate class of bankers. known as accepting houses, who make a specialty of lending their credit by this method. The name of an accepting house of known responsibility gives the paper wider currency and reduces the discount rate by enough to cover its charges.

It is generally agreed among experienced bankers that nothing would do so much to mobilize the credits of this country as the introduction of this class of commercial paper. It will do more to assure an ample supply of credit for legitimate and current business at uniform discount rates for all sections, and more to provide the banks with genuine and high class commercial paper, than any other single provision of our banking laws. It will give a character and fluidity to local credit that it has never had in this country and bring bank credits more generally into conformity with certain accepted rules that are difficult of enforcement upon paper of purely local circulation.

All bankers deem it advisable to have in their portfolios considerable paper originating outside of their depositing patrons, because such paper will be paid without requests for renewal, and the credit situation the country over would be improved by having the percentage of this class of paper increased. The difference in rates of discount between paper of this class and that which does not have access to the general market would be a constant object lesson of the value of compliance with correct banking principles.

The fact that the National Reserve Association will stand ready to take these acceptances and give currency for them will give them a broad market and thus help the different sections of the country to help each other even more than they are helped by the Association direct. The fact deserves to be emphasized that this is not centralization; it is decentralization. The central organization by supporting all of the banks of the system will impart confidence throughout the system and enable the members to deal with each other. Its influence will be against the accumulation of country bank funds in the centers, so long as any part of the country is wanting credit to finance its current business.

Holdings of either class of paper which may be re-discounted by the Reserve Association direct, will be practically an addition to the cash reserves of a bank, and this will furnish a constant incentive to the banks and to their customers to bring their paper to this standard.

The plan recognizes two additional classes of paper, which may be received by the National Association when endorsed by a local association. First, it may receive paper arising from commercial transactions having more than 28 days, but not more than four months, to run. This paper must be passed by the officers of the local association to which the applying bank belongs and the local association must stand behind it if it defaults; the members dividing the responsibility on the basis of their capital and surplus.

The local association is authorized to require security, and the borrowing bank is required to pay a commission to the local association which shall be fixed from time to time by the board of directors.

Finally, there is one more class of paper which the National Association may discount, but only under unusual conditions. The three classes heretofore named must all arise from commercial transactions and it is clearly indicated that ordinarily nothing but paper directly related to commercial transactions will be received. But whenever in the opinion of the Governor of the National Reserve Association the public interests so require, and such opinion is concurred in by the executive committee, and the Secretary of the Treasury definitely approves, the Association may discount the direct obligation of a bank, provided that obligation is endorsed by the local association and secured by collateral in its hands: but in no case shall the loan exceed two-thirds the value of the security so deposited. This class of paper is plainly intended only for emergency use and the terms of its use are such as to preclude offerings under ordinary conditions.

The objections commonly made to bank note systems are that they either permit inflation by having insufficient restrictions, are inelastic because of arbitray restrictions, or suggest monopoly by fixing control in a single authority. The last objection is met in this proposal by the plan of organization; it is met again, and the other two objections with it, by the regulations covering the classes of paper which the Reserve Association may receive. There can be no undue inflation of credit so long as its use is confined strictly to commercial purposes, nor can there be favoritism if all demands for these purposes are met at a uniform discount rate.

The rate for re-discounts will be the same upon all paper of the same class at all offices of the Association and to all applicants, and all offerings which comply with the conditions will be accepted. If in view of present banking conditions in this country this promise seems impossible of fulfillment the answer is that it

has been realized for years in practically every other important country of the world.

It has been abundantly demonstrated that the demands upon a central re-discounting institution can be controlled by its discount rate. The executive committee of the National Reserve Association will have the financial situation before it. Its members will know the condition of the world's markets; they will know whether the foreign exchanges are in our favor or against us, whether trade is in normal condition or not, whether speculation is prevalent or not, whether the banks are overloaned or not, and the committee can act as a governor upon this situation by means of the discount rate. Its members will occupy an independent position, wholly different from that of bankers who are competing for business. They will be acting for all the banks and for the entire community. They will not be looking for customers; they will not be looking for profits; they will be the guardians of the credit situation; they will take all the paper offered that complies with the conditions, regulating the rate to control the demand.

It is altogether improbable under the organization proposed that the provisions of law governing rediscounts would be deliberately or frequently violated. The intent of the restrictions is clear and with the publicity that will be given to all the operations of the association, the essential regulations could not be ignored without exposure. High officials of the government are named not only as members of the Board of Directors but of the Executive Committee, and it is inconceivable that they or the other Directors, all of whom will presumably be men of character, will permit false statements of the association to be made. Responsibilities quite as grave as these, and far more difficult of administration, are already entrusted to public officials and others are daily proposed.

These functions, which it is proposed to have the reserve association perform, are not in themselves new or experimental. The form of the organization is new, and planned to avoid any radical change in existing banking conditions, and to assure all sections of the country of proper representation in the management. The principle of a central discounting organization upon which all other banking institutions may rely, with authority to issue currency, has been developed by a process of evolution and universally accepted. The ability to control the demand by means of the discount rate is fully demonstrated. But in adopting this the plan retains what has been the distinctive and essential feature of banking in this country, to-wit: the independent, local bank, owned and managed in the community where it is located. It remains the unit of our banking system and the plan is devoted to providing an organization of these units so that they may more effectually aid and support each other. It aims to accomplish this, moreover, by means which will preserve the individuality of the unit, and offer an incentive to good banking, instead of by placing all banks on a dead level with an obligation to support each other regardless of an individual banks character, deserts, or qualifications to conduct a a banking business. The weakness of the present system is that no matter how carefully a bank may be conducted or how good its assets may be, it may be obliged to suspend payments, because conditions wholly beyond its control create an unusual demand for cash. These conditions may be the result of bad banking by reckless competitors. Good banks may be obliged to come to the relief of such rivals because to allow them to fail might seriously disturb financial conditions. Usually such aid only postpones the evil day. Under the proposed plan it will be possible for every sound bank on the strength of its own assets to obtain at any time whatever cash is required to meet its obligations. When every good bank has the power to protect itself there will be no more panics or fear of panics and every tub will stand on its own bottom.

Vague objections may be raised to centralization of power, but there is no escape from the weakness and incapacity of the present system without creating power somewhere. The plan supplies it by what would seem to be the most unobjectionable method it is possible to devise, the use of an agency which the banks themselves will control, limited in its functions and subject to practically complete supervision by the government.

With this organization or one performing substantially these functions there is little risk in saying that another suspen-

sion of cash payments will never be experienced in this country. This in itself is of great importance. It would be of inestimable value to all classes and all interests to have protection against a repetition of the experiences of 1907. But that is not all, or even the chief of benefits. Fourteen years intervened between the panic of 1893 and 1907, but in every year of that time the facilities which the Reserve Association will afford would have been helpful in many parts of the country, particularly in the crop-raising season. They will help every community to use the credit which it is entitled to use and do it under such restrictions and supervision that the banking business of the whole country will be in better condition than it has ever been heretofore. They will enlarge the credit facilities of the local banks for all special and temporary needs, protect the money markets from extreme fluctuations, and make credit

conditions more stable and uniform throughout the country.

An effort has been made in the preceding addresses to describe the functions of banking and the services which the banking business is expected to render in the modern industrial and commercial system. There can be no adequate comprehension of the pressing necessity for banking and currency reform unless these functions are understood. Our legislation upon this subject in the past has proceeded largely upon the theory that the principal function of banking is receiving and lending money, whereas the principal function of banking is dealing in credit and the use of money is only incidental thereto. Money in all the ordinary uses of trade is simply a means of transferring credits or settling balances. The great bulk of the business of the world is done without it, except as it serves in bank reserves as the touchstone

of value and as a margin of liquid capital that is quickly transferable and available anywhere. The essential and fundamental truth upon which all business relations are based is the fact that the exchanges offset and balance themselves. The bookkeeping function, the service of arranging the offsets, disposes of much the greater part of all the payments that are to be made. This service is performed by the banks and the fact that so large a proportion of the payments can be settled in this manner and without the use of money, enables the banks to finance the trade of the world so largely upon credit.

Bank credit is based upon the credit of the business public. The banks examine and verify and classify the credit of their customers and with a margin for error are able by the law of averages to create upon this basis a higher and more liquid form of credit which is placed at the service of the business community. And as the credit of one bank is usually better than that of its individual customers so the credit of a group of banks, by the law of averages, is better than that of an individual member of the group, and the credit of a system which included all or the larger part of the banks of a country like the United States would be the highest form of credit in the world.

The vital difference between bank credit and individual credit is in the fact that bank credit is treated as cash. The banks so arrange the maturing obligations of their customers that they can agree to pay all their own obligations on demand, and they make good on the promise so uniformly that their promises are accepted as cash. Their credit therefore, is buying power. It is paying power. It does everything that money can do. It is more liquid and transferable than money itself. When it is understood that the chief function of banking is dealing in credit

and that it is credit, not money, that the banks lend, the old fear that the banks will control the volume of money and conspire to manipulate it for their own advantage becomes absurd. This old fear springs from the idea that banking consists of receiving and lending actual money over the counter, when in fact the banks lend fifty dollars of credit where they lend one of money. The power to issue currency does not add in the slightest degree to the ability of the banking system to manipulate loans. There is not now, and in the nature of things never can be, any physical obstacle to a conspiracy among the banks to manipulate loans, and whether they issue currency or not has nothing to do with the power to make or withhold loans. If there was no money in the country but gold coin and United States notes the banking business would go on and the money would find its way into the banks, and the banks would make or decline loans just as they do now. The power to issue currency has but one use in a banking system, namely to supply currency to customers when wanted; and there is no possible reason why it should ever refuse currency when they want it. It is simply one form of bank credit and the public frequently find it a convenient form.

The movement pending is designed to put bank credit in the United States on a firmer, more trustworthy basis, than it has ever been before. A banking system, as we have seen, is an agency for organizing all of a country's available resources as a basis of credit. It accomplishes the seeming miracle of enabling capital to be in two places at the same time. In other words, it enables capital in one form or place to stand as a pledge for values or activities elsewhere, and as this agency is perfected and strengthened the efficiency of all our wealth-producing powers are correspondingly increased.

In conclusion let it be repeated as an admonition not to be forgotten for an instant that the vital factor in bank credit is its availability for use as money anywhere at a moment's notice. The banking credit of the United States can never be of the first class while it remains respectable for the banks to suspend payments. And not only must they pay in lawful currency but that currency must be redeemable in gold and the gold reserve must be in sight and ample for the purpose. The authority to issue the currency must be vested in some organization that will have the power to maintain such a reserve. When our banks have a neverfailing currency system at their command and the currency system has a neverfailing gold reserve behind it the United States will come into the financial leadership which by wealth of resources belongs to it.









